

## Case Study

# Module 3: The Connecticut River

### Study Questions

The Connecticut River illustrates the concept of landscape connectivity at multiple scales. There is the connectivity between the river and its associated uplands, the connectivity within the river network (mainstem and tributaries), and the connectivity between freshwater and saltwater (Connecticut River flows into Long Island Sound). First, think of a large river in a part of the country that is familiar to you. Consider a large river in a part of the country that is familiar to you. For the following questions, compare your familiar river and the Connecticut River.



1. Water quality in rivers is affected by specific land uses in the uplands.
  - a. What are the major upstream land uses affecting the Connecticut River and your familiar river?
  - b. What materials and organisms move downstream in the two rivers? -- Upstream? Are historical patterns of movement still in place? If not, what has changed?
  - c. What are the important pathways of connectivity in regard to the land use, materials, and organisms that affect river water quality?

2. Past and current land uses on your familiar river and the Connecticut River have affected connectivity within the river network (the mainstem and tributaries).
  - a. Identify an organism or ecological process for which river connectivity is beneficial.
  - b. How has the organism or process been affected by past land use? How is current land use affecting this organism or process?
  - c. Identify an organism or process that is common to both your familiar river and the Connecticut. Explain how connectivity within the river networks have affected this common element in the two river systems. How are they similar? How are they different?
3. How can our knowledge of cultural and historic resources be used in ecosystem restoration, enhancement, and protection strategies?



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